Product Name: A 1070722
Catalog No.: 4431
Batch No.: 1

CAS Number: 1384424-80-9
IUPAC Name: 1-(7-Methoxyquinolin-4-yl)-3-[6-(trifluoromethyl)pyridin-2-yl]urea

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₁₃F₃N₄O₂
Batch Molecular Weight: 362.31
Physical Appearance: Yellow solid
Solubility: DMSO to 100 mM
Storage: Store at RT

2. ANALYTICAL DATA

TLC: Rᵣ = 0.2 (Chloroform:Methanol [97.5:2.5])
HPLC: Shows 99.2% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>56.36%</td>
<td>56.36%</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>3.62%</td>
<td>3.72%</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>15.46%</td>
<td>15.53%</td>
</tr>
</tbody>
</table>
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Description:
Potent glycogen synthase kinase-3 (GSK-3) inhibitor ($K_i = 0.6$ nM for GSK-3α and GSK-3β). Displays high selectivity (>50-fold) for GSK-3 over a panel of other kinases tested, including CDK family members. Decreases phosphorylation of microtubule-associated protein Tau in vitro; protects rat primary cortical neurons against β amyloid and glutamate challenge. Brain penetrant.

Physical and Chemical Properties:
Batch Molecular Formula: $C_{17}H_{13}F_3N_4O_2$
Batch Molecular Weight: 362.31
Physical Appearance: Yellow solid
Minimum Purity: >99%
Batch Molecular Structure:

![Molecular Structure Image]

Storage: Store at RT

Solubility & Usage Info:
DMSO to 100 mM

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath). Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References: